



Denholm Consulting  
part of Denholm Australia P/L

2019

Transport and Logistics  
Capability

## Denholm Consulting

Denholm Consulting, and its network of proven associates, work closely with clients to optimise business outcomes during the planning, operational and optimisation phases of the asset lifecycle. We operate in the transport, energy and resources, agricultural, international development and corporate sectors, offering services that deliver value extraction, process improvement, risk minimisation and smart investment decisions.

We are driven to deliver real business outcomes, through our technical knowledge, commercial focus and real-world industry experience.

## Our Consulting Principal

Grant Denholm is a transport and supply chain specialist with over fifteen years of experience in port, terminal and landside transport operations, and is the Consulting Principal of Denholm Consulting. Prior to his current role Grant held various operational, leadership and consulting roles with an international professional services advisory firm and the Australian export commodities industry. He has undertaken and led a broad range of domestic and international projects for all modes and forms of transport and supporting infrastructure. Grant's interest and experience in supply chain efficiency and cost optimisation has seen him become an industry leader and innovator in adaptive and efficient transport systems at operational, strategy and policy level.

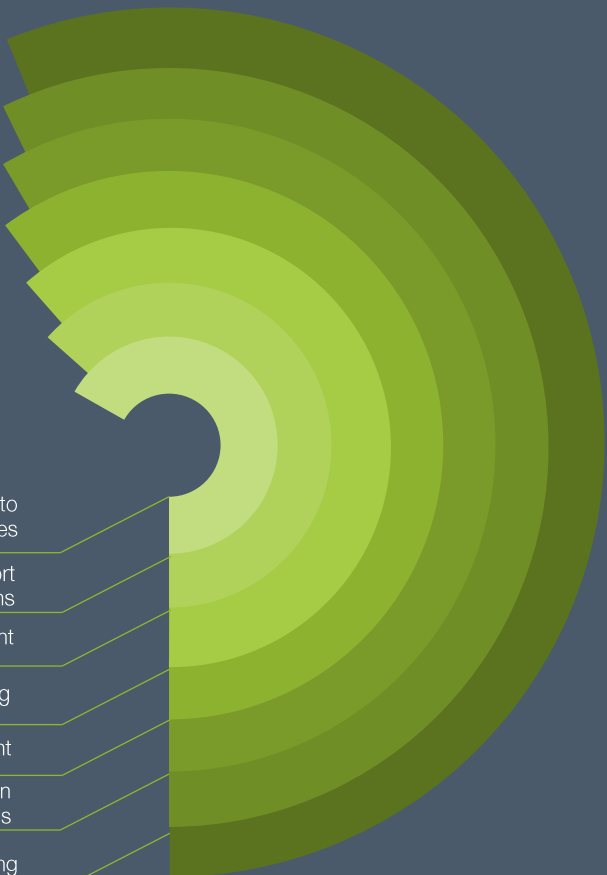
**Qualifications:** Bachelor of Applied Science (Hons), Graduate Diploma in Maritime Management with Distinction, Master of Business Administration (Maritime and Logistics Management) with Distinction



Our focus is to assist organisations improve efficiency and productivity of supply chain infrastructure and make sound choices in the investment of new capital. We are industry leaders in the development and delivery of innovative processes for optimisation and strategic analysis across many industries and sectors, with proven analytical approaches that are flexible and adaptable to provide real value.

Our market-leading position has been enabled by applying our in-depth knowledge and understanding of transport systems and logistics, and our extensive experience developing and applying qualitative and quantitative analysis methods for transport and associated infrastructure in the movement and trade of key commodities.

Our staff have significant experience gained through engagements across Australia, the Asia-Pacific region, the Middle East, Africa, North America and South America for all tiers of government, peak industry bodies and the private sector.



## Our core services include:

Logistics and supply chain investigation to support investment priorities

Identification and definition of transport options

Transport strategy development

Value in transport strategy testing

Outcome assessment

Operational strategies and regulation situation analysis

Logistics Cost Modelling



### Applied understanding of supply chain systems

---

We have worked on a wide range of infrastructure projects globally. Through our broad skill base and background in industry we combine our specialist logistics knowledge with skills such as economic analysis, operational costing and pricing models, financial analysis, policy review, and performance benchmarking to produce innovative and cost-effective solutions across multiple sectors, industries, and transport modes.

### In-depth experience in qualitative and quantitative analysis

---

We have extensive knowledge, skills and experience in conducting and developing qualitative and quantitative evaluation approaches. Our flexible and innovative approach to analysis provides clients with sound analytical processes that are transparent, meaningful and accepted by industry.

### Complex transport systems

---

We have undertaken many projects that span all major traded commodities at policy, strategy and operational level. These projects typically include a complex combination of roads, rail, terminals, ports, barges, aircraft, pipelines and ships for the movement of products between origin and destination.

### Strategy and policy

---

Our staff have a long history of providing strategy and regulatory advice to the mining, agricultural, transport, ports and international development sectors. Our experience in this area has included providing advice on the effective and efficient of development infrastructure and use of transport systems internationally, as well as the assessment of impacts that result from changes in policy and regulation for service providers, regulators and governments alike.

### Business case development

---

Our staff have extensive experience in transport related business case development for transport solutions and supporting infrastructure. We work closely with project proponents to develop sound evidence based business cases for internal and external funding purposes.



# Our staff experience

---

## Port expansion business case

Provided advice, transport chain operational cost modelling, and benefit cost analysis for commodity exports as part of a port expansion project. The work examined the change in supply chain transport costs (all modes) to market, and the resulting effect on hinterland exporter viability through achieving a lower cost pathway from the proposed capital works.

## Transport and logistics study

Provided import and export supply chain logistics analysis and advice for an international mining operation from pre-feasibility through to feasibility. The study addressed the nature, capability and cost of the transportation system to support a mine life extension. Also provided strategies for the transport of export product to market, transport of material and supplies into the mining operation and transport of personnel to and from the site.

## Transport options

Undertook a transport options study for the export of containerised products from a proposed remote development. This work involved a review of port, road and ship transport options to identify the best cost to risk transport strategy.

## Export cost benchmarking

For a project proponent, undertook a review of a Joint Venture Feasibility Study, and independently assessed the reasonableness of the proposed logistics tariff. The work included a review of the proposed off-take arrangements, assessment of the proposed rail and port infrastructure operating assumptions and subsequent costs, and evaluation of the underlying financial models. The analysis was then used to inform investment decision confidence for the proposed development.

## Terminal staging options

Undertook a supply chain logistics and cost analysis as part of a staging review for a port terminal development. The analysis included the development of transport and terminal costs for identified users within the catchment area to assess the commercial viability of operations for each user.

## Module transport logistics

Review of transport logistics options for pre-fabricated modules to be used in the construction of a fuel processing facility. The study examined the physical and regulatory constraints for the transport of oversize and over mass project cargo by rail, road and barge from multiple entry ports to a number of potential site locations. The outcome of the study determined the maximum freight (size and mass) envelope, and identified risks that may have a material impact on project delivery and costs.

## Transport system prefeasibility logistics

Undertook a maritime logistics analysis as part of minerals project assessment. The project included development of maritime strategies using a range of transshipment technologies, barge types, and export ship sizes for different production rates, barge loading locations and landside infrastructure to determine the likely operational requirements, the maritime transport cost, the preferred transshipment strategy, and make recommendation on further actions (as part of future studies) to be considered in managing maritime transport for the project.

## Port land use strategy

As part of a port master planning process, undertook trade and vessel forecasting to assess current and future port capacity required over the next 20 years. The study included analysis of current and future freight demand, vessel size, and berth occupancy for general freight, dry bulk commodities, petroleum and gas products, livestock, and oil and gas support, to assist in planning the berth and land side infrastructure over the planning horizon.

### Minerals load-out facility

Undertook a site selection, concept design, and financial analysis for a proposed multi-user load-out facility (road to rail). The study included consultation and analysis of multiple sites for the greenfield development to support existing export operations and other project developments in the region.

### Marine repair precinct growth strategy

Undertook analysis of priority developments (both infrastructure and non-infrastructure) within a significant marine repair precinct to support a long-term sustainable marine industry. The work involved an assessment of existing infrastructure, future demand/requirements, development of strategic options and assessment of the options.

### Meat processing facility

Undertook a full supply chain assessment of live cattle and processed meat as part of a prefeasibility study for different Beef Supply Chain Models to international markets. The work included a supply chain modelling assessment of domestic and international transport options.

### International coal power plant

Undertook a maritime logistics analysis for a proposed coal power plant. The project included assessment and cost modelling of coal and limestone sourcing options and maritime transport strategies, a review of maritime operations (including navigation approach and departure to the proposed maritime infrastructure location), and preliminary design of berth infrastructure based on the operations analysis.

### Sustainable shipping services

Undertook a study to identify a long-term sustainable shipping service for remote island communities. The project involved analysis of the historical shipping demand (including development of freight forecasts), benchmarking of the existing shipping service with international examples, development of potential shipping options, quantitative analysis of options, and provide recommendations regarding the most appropriate cost to risk shipping solution that was commercially sustainable.

### Strategic port review and development plan

Reviewed implementation success of strategic recommendations for several international ports, specifically related to the planning and management of the infrastructure assets. The review made recommendations to assist in dealing with supply chain efficiency and integrated transport system management to accommodate growth in container and break-bulk volumes, fuel imports and distribution, and other bulk liquid exports.

### Outbound logistics

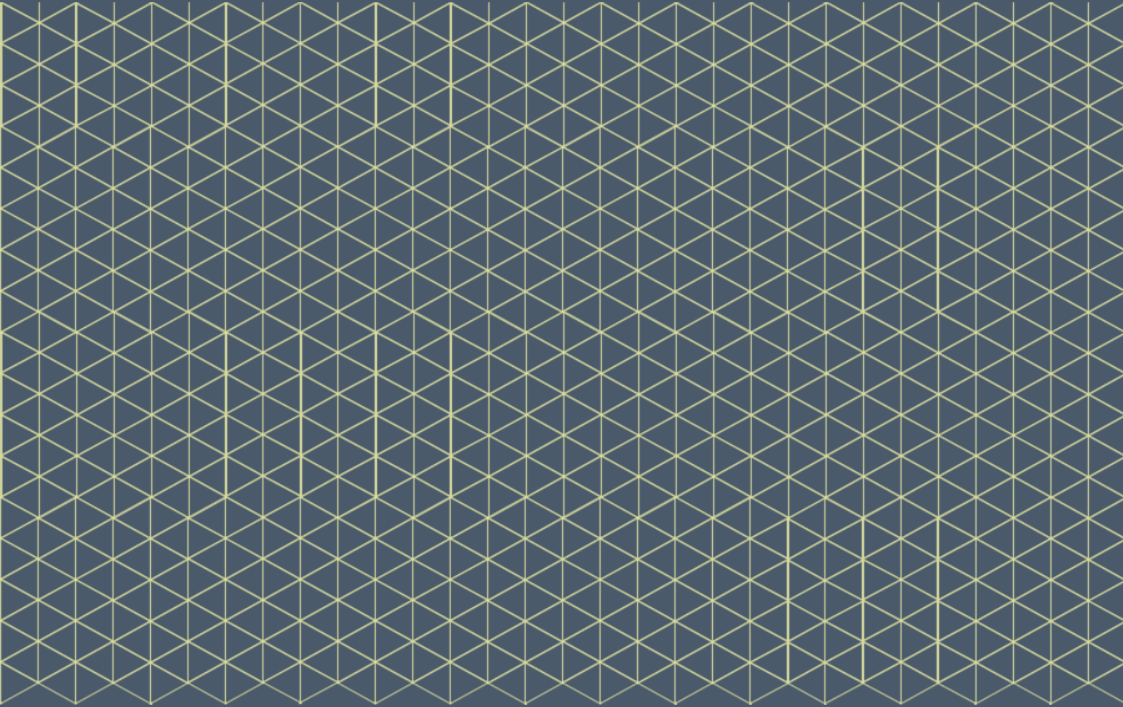
Undertook a logistics analysis of outbound processes for steel production operations. This work encompassed all components of the logistics operation from the mill to the ship's hold and provided future logistics options relating change in shipping practices and planned infrastructure development.

### Transport Cost Comparison

For an opportunity pursuit business case, undertook a cost analysis to assess the competitive position of various oil and gas platform supply vessel base locations within the region, including cost estimation of the transport value chain for delivering supplies (fuel, water, muds, and pipes) from origin to platform

### Transport Infrastructure Priorities

Developed a quantitative assessment framework and process to assess the comparative economic benefits of transport infrastructure maintenance, rehabilitation, and new construction projects as part of a country development plan. The outcome provided a consistent and robust analysis to inform clear prioritisation of spending on transport infrastructure across all modes (road, air and maritime) to allow the Government to allocate scarce financial and other resources in providing the greatest economic benefit to the nation.



**Denholm Consulting**  
part of Denholm Australia P/L

M: +61 448 829 734 | E: [info@denholm.com.au](mailto:info@denholm.com.au)

[www.denholm.com.au](http://www.denholm.com.au)